

CABINET-REAR VIEW DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Remove five screws holding cabinet back and remove cabinet back. Remove knobs from cabinet.

Disconnect picture-tube socket, high-voltage anode lead, speaker leads, and ground strap. Loosen screw holding yoke.

Remove three screws holding tuner assembly. Slide chassis and tuner assembly from the cabinet front.

PICTURE TUBE REMOVAL

Follow Chassis Removal procedure and lay set face down on a soft protective surface.

Remove four screws holding picture tube retaining wire. Lift out the picture tube.

Do not lift picture tube by the neck.

SERVICING IN THE FIELD

CRT IMPLOSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

FUSE DEVICES

A 4-amp fuse is used for AC line protection. (See photo, Cabinet-Rear View.)

VHF TUNER

Set fine tuning at the center of its range and adjust oscillator slug (one for each channel) for best sound and picture.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horizontal hold coil. (See photo, Cabinet-Rear View.)

WIDTH

The width may be varied by connecting the lead from R270 to various voltage points. (See photo, Cabinet-Rear View.)

CENTERING

Centering is accomplished by proper adjustment of two magnetic rings located on the yoke rear cover.



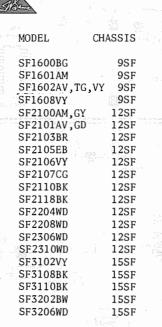
SET

ELECTRIC 12SF, 15

GENERAL 9SF, with CIRCUITRACE

GENERAL ELECTRIC CHASSIS 9SF, 12SF, 15SF

For Supplier Address See PHOTOFACT Index





MODEL SF1600BG

SAFETY PRECAUTIONS

Make sure line voltage does not exceed rating of set. Check high-voltage regulation and adjust to correct value.

Be sure shields and rear cover are in place and secure.

Beware of shock from high voltage or AC line. Discharge high voltage to HV cage only.

Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain.

CAUTION: One side of AC line connected to chassis. Use isolation transformer for servicing.

Make certain isolation networks are in place and exposed metal is safe to touch before returning set to customer.

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Main Board 5,6,12	seement and the seement of the seeme	10.200.1100

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206



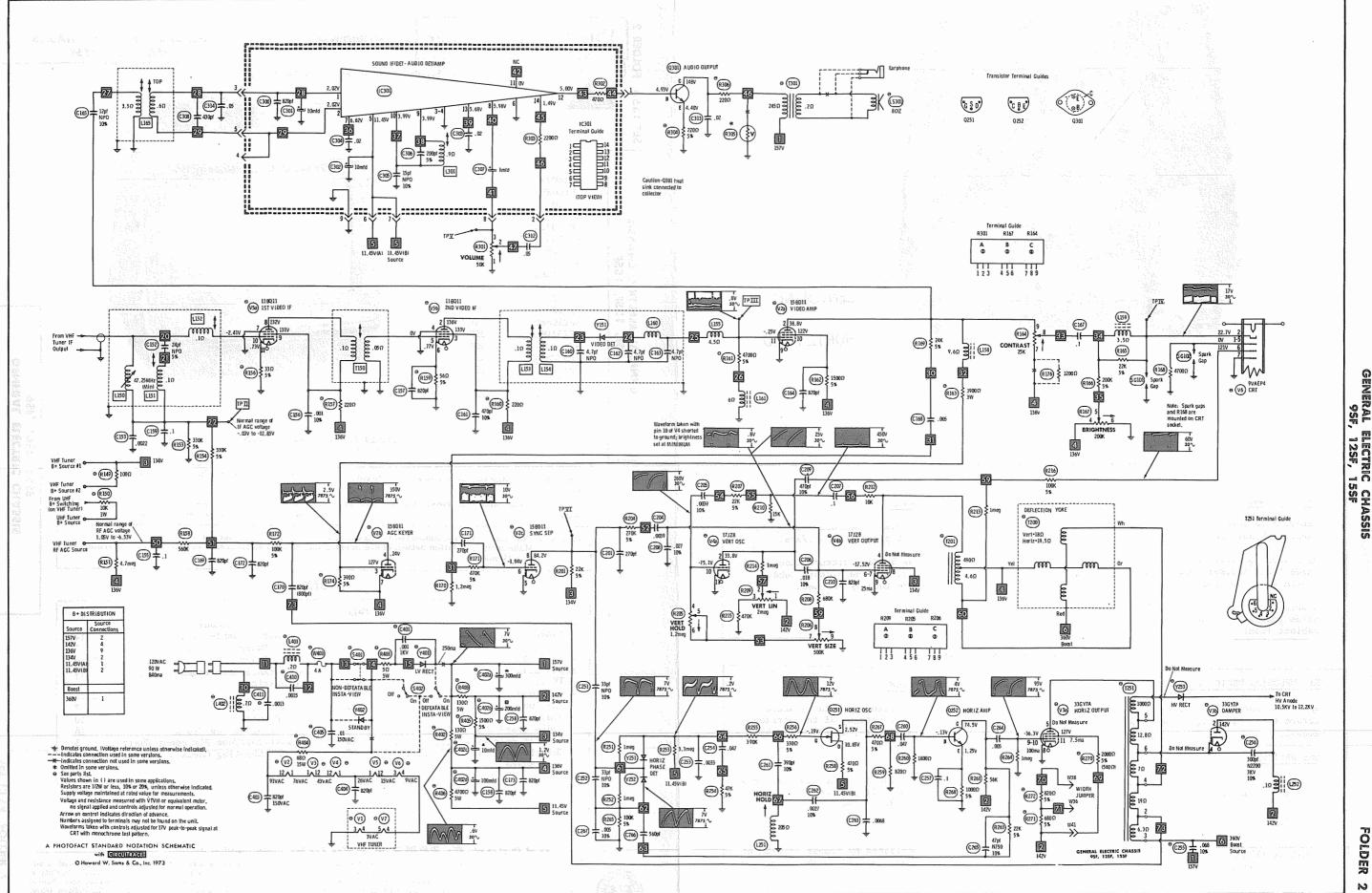
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. 3PA774

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DATE 11-73

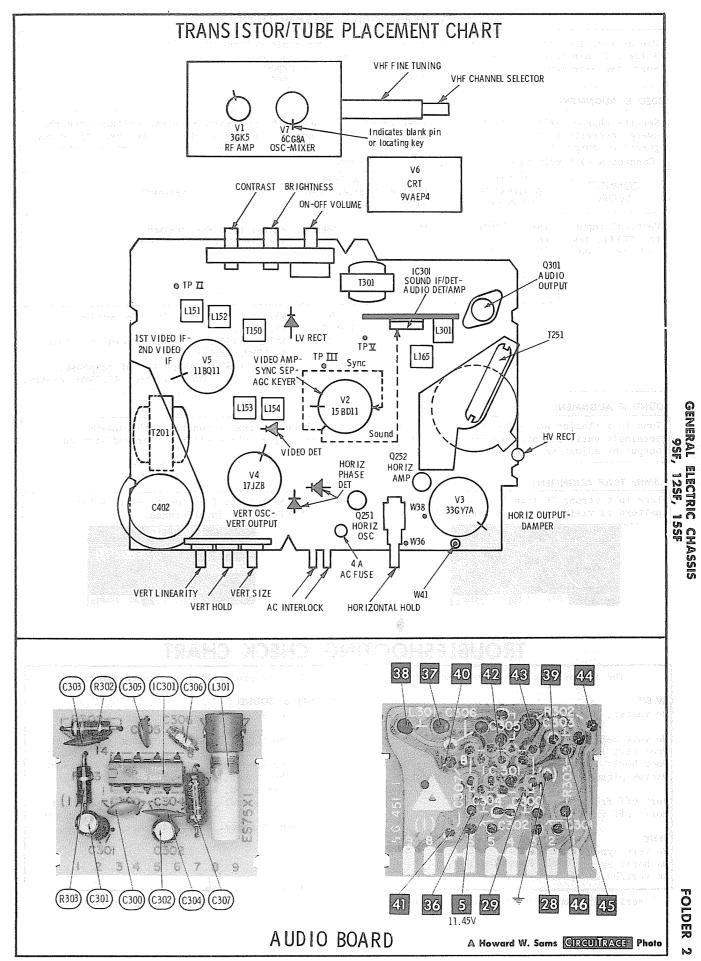
SET 1354 FOLDER 2





PIN 13		")BE TII	70007	၁	20K	*****
PIN 12		782	14Ω	14Ω	5Ω			ements below taken with meter having oby max between probe til	8000ಬ	В	8000ಬ	
PIN 11	. / s	* ₩	2100Ω †	ეე	33Ω			BETWEE	INF	В	2200	
PIN 10		1630Ω †	lmeg	1meg	300K			MAX	4500?	ITEM	0301	
6 NIA		ც	lmeg	. აი	1:005E		220K	\@@. (4500Ω			
B NId		22K †	ن ون	‡ ሪዐይ9፤	350Ω†		. აი	AVING	ಬ0008	C	13002	250K
L NId	υ0	1300 †	NC	900K	ប0	02	1630Ω†	STER H	9500 <i>Q</i>	В	2meg ^G	1800Ω
PIN 6	ن 0	1.7meg	NC	900K	<i>Ծ9</i> գ	1.2meg †	1 ಬ0001	TITH MI	σ 0	Take E	_D ප0002	1000Ω
PIN 5	1300£I	۵0	‡ ၓ႗ႃ	NC	υ <u>5</u> 0:	4700Ω	1Ω	KEN W	20002	ITEM	0251	9252
PIN 4	13	700K	INF	‡ ሪዕናዓ	ც	3Ω	3Ω	W TA	00			
PIN 3	Ծ0	530Ω †	NC	NC	350Ω †	5Ω	აი	'S BELC	υ 0	C	8200 <i>S</i> 2	
PIN 2	1mėg	3500Ω †	1300 †	1.6meg †	350Ω†	220K †	5000Ω †	REMENT	INF	В	20002	
PIN 1	۵0	24Ω	24Ω	ν8	ν8	4700 <i>Ω</i>	15K	MEASUR	볼	E	८089	150
ITEM	V1 - VHF	٧2	V3	۷4	٧5	9/	V7 - VHF	2	10301	ITEM	Q100-UHF	

ASSEMBLY TUNER



SET 1354 FOLDER 2

Use an isolation transformer, or observe polarity, and maintain voltage at 120VAC. Allow a 20-minute warm-up period for the receiver and test equipment. GC ELECTRONICS L151 thru L154, L301, T150 9440 Suggested Alignment Tools:

VIDEO IF ALIGNMENT

Set the channel selector to highest unused channel. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from that shown. Connect a -3.5 volt bias to TPII, low side to ground.

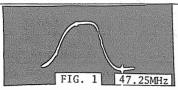
CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to TPIII, low side to ground.	Thru .001mfd to U on VHF tuner, low side to ground.	44MHz (10MHz Sweep)	47.25MHz	Adjust L151 for MINIMUM. See Figure 1 for response.
	"	AND A PART OF THE	42.17MHz 44.00MHz 45.75MHz 47.25MHz (See Fig.2)	Adjust L153, L154, T150 for maximum at 44.00MHz. Adjust L150 by spreading turns to place 42.17MHz marker. Adjust L152 to shape top of response. Adjust L135 (VHF) to place 45.75MHz marker.

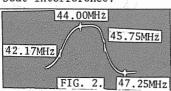
SOUND IF ALIGNMENT

Tune in a station and adjust L165 Top for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting L301.

4.5MHz TRAP ALIGNMENT

. Tune in a strong TV signal and set the contrast at maximum... Adjust the fine tuning until a beat pattern is visible on the screen. Adjust L165 Bottom for MINIMUM beat interference.





TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptom.

SWEEP

No raster, has sound: Horiz Osc/Amp/Output, Damper, HV Rect, CRT No vert deflection: Vert Osc/Output

Poor vert lin or foldover: Vert Osc/Output Poor horiz lin or foldover: Horiz Output, Damper Narrow picture: LV Rect, Horiz Osc/Amp/Output,

Vert off freq: Vert Osc Horiz off freq: Horiz Phase Det/Osc

No vert sync: Vert Osc

No horiz sync: Horiz Phase Det/Osc No vert/horiz sync: Sync Sep

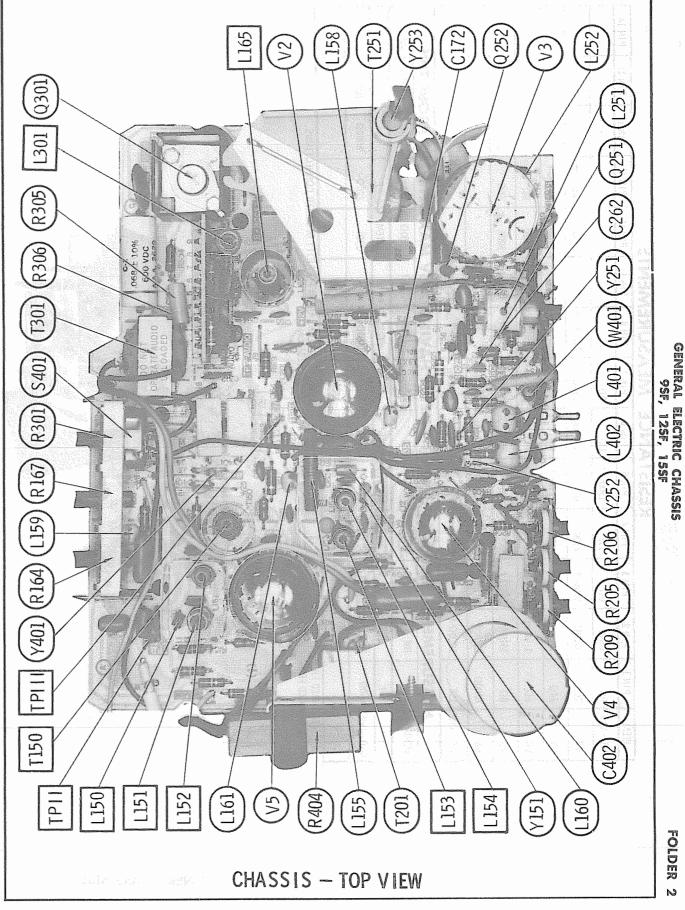
PICTURE or SOUND

No pic, no sound, no raster: Fuse, LV Rect

No pic, no sound, has raster: Video IFs, Tuner

No pic, no sound, has snow: Tuner RF/Mixer/Osc. No pic, has sound, no raster: Video Amp, CRT No pic, has sound, has raster: Video Amp Has pic, no sound: Sound IF Det/IF, Audio Det, Audio Amp/Output

Overloaded picture: AGC, Video Det.



A series filament circuit is used; an open filament in any tube will cause the set to be inoperative.

FOLDER

GENERAL ELECTRIC CHASSIS 9SF, 12SF, 15SF

FOLDER 2

VHF TUNER PARTS LIST AND DESCRIPTION

TUBES

AMPEREX		GENERAL ELECTRIC		RCA	SYLVANIA
ITEM		TYPE	ITEM No.	USE	TYPE
No.	RF Amp	3GK5 #	¥7	Oscillator - Mixer	6CGBA #
1 **	Id resp				

CAPACITORS

				REPLACEMENT DATA					
ITEM No.	RATING		MFGR. PART No.	ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C103a b c d C106 C107 C108 C109 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121	27pf NPO 27pf NPO 27pf NPO 6.8pf N330 47pf N330 15pf N330 001 5001 001 001 001 001	5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5	33X63 18X604 23X28 23X13 21X64 23X13 23X76 23X13 22X76 22X76 22X76 23X13 22X74 23X13 23X13 23X13 23X13 23X13	cco-102	00-102 00-102 DTZ-2R2	GP1000 GP1000	• SH210 SH210 • CN0522	10TCS-V6.8 10TCC-V30 2SS-010 2SS-010 10TCT-010 10TCC-V22	

COILS (RF-IF)

ITEM No.	USE	MFGR. PART No.	NOTES
L101	Ant RF Mixer Osc.	ES62X2	UHF Channel Strip
L102	Ant RF Mixer Osc.	ES62X3	Channel 2 Strip
L103	Ant RF Mixer Osc.	ES62X4	Channel 3 Strip
L104	Ant RF Mixer Osc.	ES62X5	Channel 4 Strip
L105	Ant RF Mixer Osc.	ES62X6	Channel 5 Strip
L106	Ant RF Mixer Osc.	ES62X7	Channel 6 Strip
L107	Ant RF Mixer Osc.	ES62X8	Channel 7 Strip
L108	Ant RF Mixer Osc.	ES62X9	Channel 8 Strip
L109	Ant RF Mixer Osc.	ES62X10	Channel 9 Strip

ITEM No.	USE	MFGR. PART No.	NOTES
L110 E111 L112 L113 L135 L138 T101	Ant RF, Mixer, Osc. Ant RF, Mixer, Osc. Ant RF, Mixer, Osc. Ant RF, Mixer, Osc. IF Output Fine Tuning Ant Input Ant Input	ES62X11 ES62X12 ES62X13 ES62X14 ET36X775 ET36X777 EU37X39 ET62X233	Channel 10 Strip Channel 11 Strip Channel 12 Strip Channel 13 Strip Complete Assembly Includes RC101/02

AII2CI	ELLANEOUS			
ITEM No.	PART NAME	PART No.	NOTES	
M101 M102 RC101 RC102	Shaft, Fine Tuning Cam, Fine Tuning Component Combination Component Combination		130pf, 1.85-3.5meg 130pf, 1.85-3.5meg	

UHF TUNER PARTS LIST AND DESCRIPTION

SEMICONDUCTORS

	i 1881	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	REI	LACEMENT D	ATA	NAMES OF STREET	Salai si silika	1
ITEM No.	TYPE / MFGR. No. / PART No.	GENERAL INTERNATIONAL ELECTRIC RECTIFIER PART No. PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	1
Q100 Y1	2SC288A	GE-11 IRTR-83 1N82A 1N82AG	PTC133 PTC217	HEP720 HEPR0700	SK3019 SK3089	RT108	ECG 108 ECG 112	1

CAPACITORS

	-			REF	LACEMENT DA	TA	
No.	RATING	MFGR. PART No.	ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C2 C3 C4 C5 C6 C7	27ef 5% .5pf 15pf .001 .001						

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ADJUSTMENTS

Individual oscillator slugs are accessible through a hole in the front of the tuner. Set the fine tuning at mid-range. Starting with the highest active channel, adjust the appropriate slugs, in descending order, for the best picture and sound.

RF AND MIXER ADJUSTMENTS

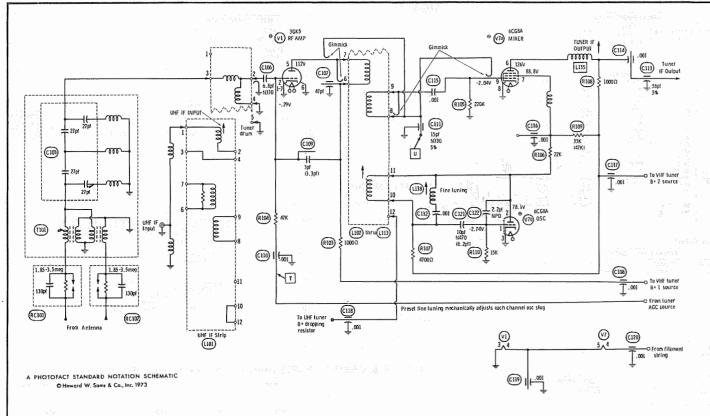
Connect the sweep generator across antenna terminals with 120-ohm carbon resistor in each lead. Refer to chart below for generator frequencies. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the scope for horizontal deflection.
unless otherwise noted. Connect a variable bias to the RF AGC line at
Point T. Adjust bias to obtain response curve showing no overload.

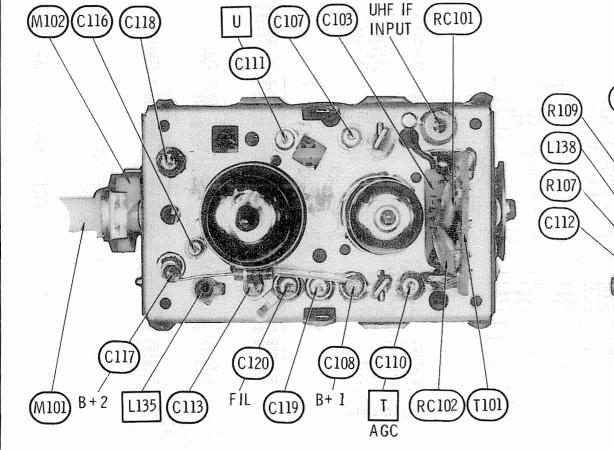
	CHANNEL	CONNECT SCOPE	REMARKS
	13 	Vertical input to point low side to ground.	Expand or compress appropriate coils for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
The state of the s	12, (b. *thru * 2	Vertical input to point low side to ground.	Check all channels and make compromise adjustments by expanding or compressing appropriate coils if necessary.

	GENERATOR FREQUENCY Numbers in () indicate channel number							
SWEEP	MARKER	SWEEP	MARKER	SWEEP	MARKER			
(3) 63MHz	59.75MHz 61.25MHz 65.75MHz 67.25MHz 71.75MHz	(8) 183MHz	83.25MHz 87.75MHz 175.25MHz 179.75MHz 181.25MHz 185.75MHz 187.25MHz 191.75MHz	(12)207MHz	197.75MHz 199.25MHz 203.75MHz 205.25MHz 209.75MHz	SOUND VIDEO		

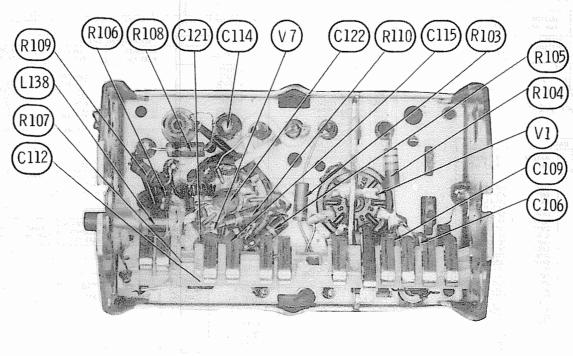
UHF TUNER ALIGNMENT INSTRUCTIONS

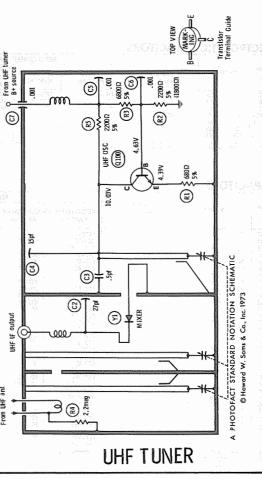
Select a UHF station. Adjust UHF IF input coil for best picture and sound.





VHF TUNER





(F)

(C2)

Replacement parts shown may be superseded by the ovailability of newly introduced replacements. Havo your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

100	JEJ		 		
	AMPEREX	GENERAL ELECTRIC		RCA	SYLVANIA
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
	Video Amp-AGC Keyer-Sync Sep. Horiz Output-Damper	158D11 # 33GY7A #	V4 V5	Vert Oscillator-Vert Output 1st Video IF-2nd Video IF	17JZ8 # 110Q11 #

[#] For SAFETY, replace only with equivalent part.

PICTURE TUBE

ITCH	ER THAT SEE	REPLACEMEN	T DATA		7.
No.	MFGR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	NOTES
. V6	9VAEP4 # 12CWP4 # 16CWP4 # or 16CWP4A #	9VAEP4 12CHP4 16CHP4		16CWP4 (1)	Used in Chassis 95F. Used in Chassis 125F. Used in Chassis 155F. Used in Chassis 155F.

[#] For SAFETY, replace only with equivalent part.

SEMICONDUCTORS

DEIAI	COMPOCIO	ĸJ									
			REPLACEMENT DATA								
No.	TYPE / MFGR, No. / PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.			
Y151 Y251 Y252 Y253 Y401	EP16X3 ES16X27 ES16X3D ES57X21 # ES57X1 #	1N60 GE-3DD GE-300 GE-504A	1N60 0200 0200 0200 JJ1300 806 or 5A6D	PTC2D6 PTC214 PTC214 PTC211 PTC202	HEP135 HEPR0602 HEPR0602 HEPR0054	SK3088 5K3100 5K3100 SK3068 SK3017A or SK3032	RT218 RT218 RT210 or RT215	ECG 109 ECG 177 ECG 177 ECG 503 ECG 116 or ECG 117			
Q251 Q252 Q301	T1208/ES15X92 T1208/ES15X93 RS7312/EP15X16	GE-FET-2 GE-18 GE-12	FE-100 IRTR-87 IRTR-23	PTC152 PTC125 PTC104	HEPF0021 HEPS0001 HEP240	SK3116 SK3024 SK3021	RT175 RT114 RT128	ECG 132 ECG 128 ECG 124			

ELECTROLYTIC CAPACITORS

			REPLACEMENT DATA							
ITEM No.	RATI	ING	MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
C301 C302 C307 C402a	10 10 1 300 200 10	25V 25V 50V 175V 150V 150V	ES31X254	RME-B-G-010 RME-B-G-010 ME-1-J-001	EP30-10 EP30-10 EA50-2	PC10-25 PC10-25 WBR1-50	VTT10A25 VTT10A25 MTA1050	EV-1322 EV-1322 TVA-1300 PCL-4449.1		

[#] For SAFETY, replace only with equivalent part.

	1 (4)	:		REP	LACEMENT DA	TA 🗵	
No.	RATING	MFGR. PART No.	ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C152 C153 C155 C156 C156 C156 C156 C156 C160 C161 C161 C162 C163 C163 C163 C163 C163 C163 C163 C163	24 NPO 5% .0022 .11. 50V .12. 50V .13. 150V .4.7 NPO 10%	ET18X123	CCT0-240 CCD-222 1DP-2-104 CCD-102 CCD-821 CCD	00-222 D0-102 D0-821 00-821 00-821 00-471 OTZ-487 B0-821 CK-502 CK-502 D0-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821 00-821	GP2200 GP820 GP820 GP820 GP820 GP820 GP820 GP820 GP820 GP820 MP047 GP820 MP047 GP820 MP047 GP820 MP012 DPM52P1 MP047 GP820 GP8	GP222 EHF1A010 SM210 GP382 GP382 EHF1A010 CH0547 GP387 CH0547 GP382 CH0412 EHF2010 TA250 GP382 CH7327 GP382 CH7327 GP382 CH7327 GP382 GP382 CH7327 GP382 GP382 CH7327 JF233 EHF1A010 GP382 EHF4015	10TS-022 225910491M03 2SS-010 10TS-T82 10TS-T82 10TS-T87 10TCC-V47 10TS-T47 10TCC-V47 10TS-T82 10TCC-012 2PS-P10 T6-050 10TS-T82 10TCC-1012 2PS-P10 T6-050 10TS-T82 10TC-127 10TS-T82 10TC-127 10TS-039 6PS-039 192918394 4PS-P16 155930302 10TS-T82 10TCC-033 10TCC-033 10TCC-033 225947391M03

CAPACITORS (cont)

					,	REF	LACEMENT DA	TA	
No.	·	RATING	. نيا	MFGR. PART No.	ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART Na.
C258 C260 C261 C262 C263 C264 C265 C266 C303 C304 C304 C305 C306 C306 C306 C307 C306 C307 C306 C307 C306 C307 C307 C307 C307 C307 C307 C307 C307	820	50V 50V N75D NPO 125V 50V 1KV 150VAC	10x 10x 10x 10x 10x 5x 5x	ES25X24	CCD-821 10P-2-473 0H-20-2723 10P-1-682 CCD-502 CCTM-470 CC0-503 CCD-203 CCD-203 CCTO-150 0H-19-2013 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-503 CCD-821 CCD-821	00-821 CPR-2700J CK-502 071-47 00-561 00-562 00-821 CK-203 CK-203 072-15 CPR-200J CCPR-430J CX-503	PARI No. GRE0 GRE0 GPS00 GPS0547 C019F0272J03 CPS000 KP002 KP003 KP002 KP003 KP003	GP382	10TS-T82 225P47391W03 MS-227 4PB-068 TG-050 10TCU-047 10TS-T55 10TS-050 10TS-50 TG-520 10TCC-015 424HE2000J501 MS-343 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550 TG-550
C410 C411	.0015 .0013	150VAC		ES22X4 # EP18X37 # ES18X60 #	GED-152	09-152-C) 09-132 E)		SHA110	1015-015 0 12

For SAFETY, replace with equivalent part.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM		RESIST-			REPLACEMENT I	DATA	
No.	FUNCTION	ANCE	MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS—IRC PART No.	MALLORY PART No.
R164 R167 R301 R205 R206 R209	Contrast Drightness Volume/Switch Contrast Brightness Volume/Switch Vert Hold Vert Size Vert Linearity	25K "c" 200K "b" 50K "a" 25K 200K 50K 50K "c" 500K "c" 2meg "a"	ES49X86 (73C180025-16) (1) (4) ES49X81 (2) ES49X82 (2) ES49X87 (2) ES49X2 (73C18008-3) (3)	Communities of the Community of the Comm			
	Total Comeditor	Liney . a	107	: [CH]			

RESISTORS (Power and Special)

ITEM		REPLACE	MENT DATA	ITEM		REPLACE	MENT DATA
No.	RATING	WORKMAN PART No.	MFGR. PART No.	No.	RATING	WORKMAN PART No.	MFGR. PART No.
R149	100 1/2W, Carbon	CA100	,	R271	680 5%,1/2W,		
R150 '	10K 5%,1W,Carbon		ā	1	Carbon		•
R156 .	33 5%,1/2W, Carbon	: -	. 1 9 3	R272	820 5%,1/2W, Carbon		
R157	220 5%,1/2W, Carbon			R304	220 5%,1/2W, Carbon		#
R159	56 5%,1/2W, Carbon		#	R306	220 5%,1/2W, Carbon		#
R160	220 5%,1/2W, Carbon			R401 R402	5 10W, WW 130 5%, 5W, WW	10H-SQ-5	ES14X38 #
Bje1	4700 5%,1/2W, Carbon			R403 R404	130 5%, 5W, WW		ES14X10 # ES14X10 #
R163	3900 3H, HH		ES14X37 ₽	R405	1500 5%,1/24,		E5]4X42 #
R174	390 5%,1/2W	1	2314737	1.403	Carbon	1	9
	Carbon		· 1	R406	4700 5W, WW	5H-SQ-4.7K	ES14X43 #
R270	2000 5%,1/2W, Carbon		# (1)			3n-3q-4.7k	L314A43 F
	560 5%,1/2W, Carbon		# (2)				

(1) Used in 9" models COILS (RF-IF)

EM		11 × 1 × 1 × 10 × 10 × 10 × 10 × 10 × 1	REPLACEMENT	DATA	
lo.	USE TO AND	PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L150 L151 L152	Video IF Input (4 Turns) 47.25MHz Trap Video IF Input	ES36X115 E536X117 ES36X754		23A477RPC (2)	TA294

No.		PART No.	PART No.	PART No.	PART No.
L150 L151	Video IF Input (4 Turns)	ES36X115			1
L152	47.25MHz Trap Video IF Input	E536X117	1	23A477RPC (2)	
L152	2nd Video 1F	ES36X754 ES36X757	44.64	7537 (2)(3)	TA284
L154	Video Detector	ES36X116		7537 (2)(3) 7537 (2)(3)	TA284
L155	Peaking (37uh)	EP36X7	19-3036	6176	TA284 T301
L158	Peaking (750uh)	EU36X376	19-2031	4651	T872
L159	Peaking (270uh)	ES36X118	19-3275	72F274AP	T316
L160	RF Choke (10uh)	ES36X61		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1310
L161	Peaking (680uh)	EP36X19	19-3660	72F684AP	TA330
L165	Sound Take-off-4.5MHz Trap	ES36X119	M New Art		
L252	RF Choke (5.6uh)	EU36X536	19-1004	74F566AP	T821
L301	Sound Detector	(1)	. The planting of the left		
L401	Line Choke (100uh)	ES36X28 #		5250	11 11 11 11 11 11
L402	Line Choke (100uh)	ES36X28 #		5250	1 - 1 July 1
T150	1st Video IF	ES36X23	PUBLISHED TROOP	7513P	TA285

⁽¹⁾ Part of Audio Module, Part ES75X1.

For SAFETY, replace only with equivalent part.

COILS (Sweep (ircuits)

(2) Remove unused terminal. (3) Connect as in original circuit.

	Cara Stall - March	States I revisit to an	REPLACEMENT DATA							
ITEM No.	FUNCTION	MFGR. PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.			
L251	Horiz Oscillator (Hold)	ET35X51			Na.					

TRANSFORMERS (Sweep Circuits)

1-5.4	USE	1. 2020 1. 33				
No.		MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	NOTES
T200 T201 T251	100° (Yert 65mh) Vert Output	ES76X4B # E564X6 # (M12BJ776-2) ES77X17 # (1) E577X16 # (2)	r carry	Property and the second se		(1) Used in Chassis 9SF. (2) Used in Chassis 12SF and 15SF. For SAFETY, replace only with equivalent

TRANSFORMER (Audio Output)

\ ,	ITEM No.	IMPEDANCE			REPLACEME			
				MFGR.	STANCOR	STANCOR THORDARSON		NOTES
J.		PRI.	RI. SEC. PART No.		PART No.	PART Na.	PART No.	
00/	T301	6300	8	ES64X13 # (73B140700-1)				# For SAFETY, replace only with equivalent part.

SPEAKER

		REPLACEMEN	DATA	NOTES		
No.	TYPE	MFGR. PART No.	QUAM PART No.			
L5301	3" PM 8 ohms 3" PM 8 ohms.	ES95X8 # ES95X52 #	30A05RZB Q30A05	Round With Square mounting; Used in Models 5F2306WO and 5F2310WO only. ∌ For SAFETY, replace only with equivalent part.		

FUSE DEVICES

. 03	E DEVICES										
ITEM No.		REPLACEMENT DATA									
	DESCRIPTION	PAR	Γ No	BU PART		LITTELFUSE PART No.		WORKMAN PART No.			
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE			
W401	4A @ 250V Quick Acting, Pigtail	EP10X52 #		GJV 4		318004	1	;			

[#] For SAFETY, replace only with equivalent pa

MISCELLANEOUS

No.	PART NAME	PART No.	NOTES
	VHF Antenna VHF Antenna	ES83X16 ES83X3	Models SF16000G, SF1601AM, SF1602AV,TG,VY, SF160BVY JFO Replacement TA-525, Models SF2100AM,GY, SF2101AV,GO, SF21030R, SF210SEB, SF210SVY, SF2107CG, SF2110BK, SF2118BK, SF2104MO, SF220BMO, SF2306MO, SF2310MD, SF3102VY, SF3202GMW, SF3206MO
	VHF Antenna	ESB3X63	JFO Replacement TA-439, Models SF31080K, SF3110BK.
	UHF Antenna	EP83X1	JFO Replacement TA-433
	VHF Tuner	ESB6X3	or or representative from the
	UHF Tuner	ES85X1	
5401	5witch	ES39X18 ₽	Power On-Off (Insta-View), Used in Models SF1608VY, SF2118BK, SF2306WD, SF2310WD
	Switch	ES39X36 #	Power On-Off (Insta-View), Used in Models SF2107CG, SF2110BK, SF220BWD, SF310BBK, SF3110BK.
	Switch	ES39X14 #	Power On-Off, Used in Model SF3202BW.
	Switch	E539X15 #	Power On-Off, Used in Model SF32D6WD.
SG101	Spark Gap	ES41X4	1.5KY
SG102	Spark Gap	E541X4	1.4KV
	Module	E575X1	Audio

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

	, , , , , , , , , , , , , , , , , , , ,		in a day and		
ITEM	PART No.	PART No.	PART No.	PART No.	PART No.
MODELS:	SF1600BG	SF1601AM	SF1602AV	SF1602TG	SF1602VY
Cabinet Front	ES99X110	CC00V141	£500×110	FERRYZZO	5e00V111
Cabinet Back	ES98X67	ES99X141 ES98X78	ES99X118 ES98X69	ES99X119	ES99X111
Knob - VHF-UHF Selector	ES43X195	ES43X195	E543X195	ES98X70	ES98X66
Knob - VHF-UHF Fine Tuning				ES43X195	ES43X195
Knob - Secondary Controls	ES43X196	ES43X196	ES43X196	ES43X196	ES43X196
KIND - Secondary Controls	ES43X197	ES43X191	ES43X191	ES43X191	ES43X191
MODELS:	SF1608VY	SF2100AM	SF2101AV	SF2103BR	SF2105E8
Cabinet Front Cabinet Dack	ES99X129	ES99X115	ES99X44	E599X99	ES99X16
Knob - VHF-UHF Selector	ES98X66	E598X68	ES9BX23	ES98X42	E598X76
Knob - VHF-UHF Fine Tuning	ES43X195				
Knob - Secondary Controls	ES43X196 ES43X191	ES43X656	ES43X655	FEAGUED	55404656
Window - Ultra-Vision	ES94X17	E343X030	E543X055	E543X53	E543X656
Knob - VHF Selector	E594X17	ES43X200	ES43X738		
Knob - UHF Selector				ES43X738	
Knob - VHF Fine Tuning		ES43X201	ES43X66	ES43X66	ES43X65
Knob - VAF Fine Tuning Knob - UHF Fine Tuning		E543X37	ES43X81	ES43X659	ES43X37
KIND - ONE FIRE TURING		ES43X25	ES43X665	ES43X666	ES43X65
MODELS:	SF2106VY	SF2107CG	SF21108K	SF2100GY	SF2101GD
Cabinet Front	ES99X134	E599X31	ES99X105	ES99X44	ES99X136
Cabinet Back	ES98X42	E598X27	ES98X27	ES98X27	ES98X77
Knob - VHF-UHF Selector	3-2-2-2-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3				
Knob - YHF-UHF Fine Tuning					
Knob - Secondary Controls	ES43X656	ET43X656	ES43X56	ES43X53	/ET43X655
Window - Ultra-Vision	A	1/2	ES94X118		********
Knob - VHF Selector		ES43X663	ES43X663	E543X212	ES43X738
Knob - UHF Selector Knob - VHF Fine Tuning	ES43X65	ES43X65	ES43X65	E543X65	ES43X66
Knob - YHF Fine Tuning	ES43X37	ES43X37	ES43X37	ES43X659	ES43X81
Knob - UHF Fine Tuning	ES43X65	ES43X6S	ES43X65	ES43X666	ES43X665
MODELS:	SF2118BK	5F2306W0	5F2310W0	SF3102VY	SF3110BK
Cabinet Front	ES99X133	ES99X127	E599X128	ES99X106	ES99X124
Cabinet Dack	ES98X76				
Knob - Secondary Controls	ES43X53	ES98X73 ES43X206	ES98X73 ES43X206	ES98X61 E543X680	ES98X9 E543X680
Vech Wil Coloston	ES43X79	ES43AZUD	E543X2U0	ES43X680	
Knob - VHF Selector Knob - UHF Selector	ES43X65			E543X80	ES43X663 ES43X80
Vnoh - VHE Fine Tuelne	ES43X37	2552		ES43X659	
Knob - VHF Fine Tuning Knob - UHF Fine Tuning	ES43X666	555 T 13W		ES43X666	ES43X659
Window - Ultra-Vision	ES94X118	100	ES94X16	E343X000	E543X666
Knob - Pack-UHF, VHF Selector, Fine Tune	E2944110	ES43X207	E543X207		
MODELS:	SF1600BG	SF1602AV	5F1602TG	SF1602VY	SF31086K
	THE PERSON	\$4 784 m			1.7
Cabinet Front	ES99X110	ES99X118	ES99X119	ES99X111	ES97X1
Cabinet Back	ES98X67	ES98X69	ES98X70	E598X66	ES98X9
Knob - Secondary Controls	ES43X197	E543X191	ES43X191	ES43X191	ES43X680
Knob - Pack UHF-VHF Selector	ES43X195	E543X195	ES43X195	ES43X195	
Knob - Pack UHF-VHF Fine Tuning	ES43X196	E543X196	ES43X196	ES43X196	
Knob - UHF Fine Tuning	(- 22007			ES43X666
KNOD - VAL LINE LUNING					ES43X659
Knob - UHF Selector					ES43X80
Knob - VHF Selector	See Administration of the	Consequented or (Chr.	0.0007		ES43X663
MODELS:	SF2204WD	SF2208W0	SF3202BW	SF3206H0	
Cabinet Front	ES99X64	ES99X55	ES99X108	. ES99X107	
Cabinet Back	ES99X37	ES98X37	ES98X62	ES98X63	
Knob - Secondary	E543X104	ES43X104	ES42X27	E543X27	
Knob - UHF Selector	E\$43X100	ES43X100	ES43X186	ES43X186	
Knob - UHF Indicator	E543X117	E543X117	ES43X187	E543X187	
Knob - VHF Selector	ES43X115	ES43X115	ES43X168	ES43X168	
Knob - VHF Fine Tuning	E543X103	ES43X103	ES43X169	ES43X169	
	F3434103			F943V103	
Window - Ultra-Vision		ES94X8			

WIRING DATA

v	VIKINO DAIA							
Γ	High Voltage Lead	Use	BELOEN	No.	8869	(17KV) or 8868 (25KV)	1.11.11	
- 1	Shielded Hook-up Wire	Use	BELDEN	ιoi.	8885	(Single Conductor)		
- 1	The state of the s					(Two Conductor)		
	General-use Unshielded Hook-up Wire	Use	BELDEN					
J						(Stranded) Available in	12 Colors	
- 1	300-0hm Tuner Input Lead							
- 1	300-Ohm Antenna Lead-in							
- 1	Antenna Rotor Cable	Use	BELOEN	Ňο.	8464	(Flat) or 8484 (Round)	- 4 Conductor	
- 1						(Round) - 5 Conductor		
						(Dough) - D Conductor		

^{*} Part of Audio Module, Part #ES75X1.